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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/262,126	03/03/1999	BRIAN S. MILLER	GC396-2	8961

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PALO ALTO, CA 943041013

EXAMINER

RAO, MANJUNATH N

ART UNIT	PAPER NUMBER
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1652

DATE MAILED: 07/16/2002

26

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/262,126

Applicant(s)

MILLER ET AL.

Examiner

Manjunath N Rao

Art Unit

1652

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 19 June 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☒ A Notice of Appeal was filed on 6-19-02. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.
- NOTE: _____.
3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See attached.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 9,10,31 and 32.

Claim(s) objected to: 12.

Claim(s) rejected: 5-8, 11, 14-15, 27-30, 33-40.

Claim(s) withdrawn from consideration: _____.

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

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Advisory Action

In response to the finale rejection of the above application applicants have amended the claims and also traversed the rejection of claims 5-8, 11, 14-15, 27-30, 33-40. However, such arguments and amendments are still not persuasive to overcome the rejection and put all claims under condition for allowance because of the following reasons.

Claim 5 is confusing as it is not clear to the Examiner whether applicants are claiming the enzyme with a designation number or a bacterial strain.

While applicants amendments does overcome the rejection under 35 U.S.C. 102(b) as being anticipated by Ara et al., applicants' arguments that Deweer et al. does not anticipate the variant enzyme with an extra amino acid as in claim 11 is still not persuasive to overcome the rejection. This is because Deweer et al. clearly disclose a modified pullulanase enzyme isolated from *B.deramificans* T 89.117D which differs from the wild type by at least one amino acid. The modification taught by Deweer et al. would encompass the modified pullulanase claimed in claim 11. Therefore Deweer et al. continue to anticipate claim 11 and its dependent claims.

Applicants have also vehemently argued against rejection of remaining claims under 35 U.S.C. 103(a) as obvious over Deweer et al. and Albertson et al. or McPherson et al. Contrary to applicants argument, the reference of McPherson et al. is aimed at all pullulanases in general even though some of its focus is on the pullulanase of *Klebsiella*. The reference clearly teaches that pullulanases in general are large enzymes and that truncation of pullulanases generally leads to an increase in the efficiency of the enzyme by 30%. That teaching by itself and also due to the well known fact in the art that pullulanases have industrial application would have motivated

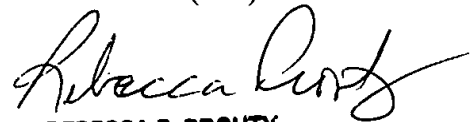
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one of ordinary skill in the art to produce truncated pullulanase from large size pullulanases regardless of its source.

Albertson et al. also teach a similar aspect of pullulanases and even compare sequences from *Bacillus* and other bacterial species. Applicants argue at length that in addition to the conserved regions revealed by Albertson et al., they have disclosed two other conserved regions and those regions are not taught by Albertson et al. Applicants also argue that they further disclose that the limits of amino acid truncations in the N-terminus of pullulanase would not go beyond the "Y" region. However, such arguments are moot as claims are not directed to identification or disclosure of conserved regions of pullulanases. Therefore, for all the above reasons, Examiner continues to maintain the above rejection of claims under 35 U.S.C. 103(a) as being *prima facie* obvious.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manjunath Rao whose telephone number is (703) 306-5681. The Examiner can normally be reached on M-F from 7:30 a.m. to 4:00 p.m. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, P.Achutamurthy, can be reached on (703) 308-3804. The fax number for Official Papers to Technology Center 1600 is (703) 305-3014. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Manjunath N. Rao. Ph.D.
July 15, 2002


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